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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,663	08/21/2003	Katsuhiro Onuki	1-16254	9930

7590 06/02/2005

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EXAMINER

KING, BRADLEY T

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/646,663

Applicant(s)

ONUKE ET AL.

Examiner

Bradley T King

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-10 is/are pending in the application.
- 4a) Of the above claim(s) 2 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4 and 6-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/03/2005 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites "said upper surface" and "said guide rail". It is not clear how the slider member of the second guide rail can engage "said upper surface" as the only previously recited surface corresponds to the first guide rail.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4 and 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by DE 41 16 795.

DE 41 16 795 discloses all the limitations of the instant claims including: a guide rail 1; a table 2 including a slider comprised of a slider member 11 which is guided by said guide rail for a motion along a length said guide rail, said slider comprising a moveable slide block 12 that is adapted to slide along a surface of said guide rail and is supported by said slider member so as to be moveable toward and away from said guide rail surface; a linear motor (note screw shaft and column 2, lines 55-60) for actuating said table along said guide rail; and a power actuator 28-29 for selectively moving said moveable slide block toward said guide rail surface; said moveable slide block sliding over said guide rail surface for a guiding action in a first state of said power actuator and bearing upon said guide rail surface for braking action in a second state of said power actuator; wherein said guide rail is provided with an upper surface and a pair of side surfaces (17 and 15) each forming an acute angle with respect to said upper surface, and said slider member is provided with a bottom surface engaging said upper surface (see figure 5), a fixed slide block (note portion near the reference number 11 in figure 5) engaging one of said side surfaces 17 while said moveable slide block 12 engaging the other 15 of said side surfaces.

Regarding claim 4, DE 41 16795 discloses a pair of parallel guide rail members and a pair of laterally arranged sliders. See figure 1.

Regarding claim 6, note figure 5 shows a pair of fixed slide blocks, one near reference number 11 and one on the opposite side.

Regarding claim 7, note the fixed slide blocks are always engaged with the rail through the damping mechanism 31.

Regarding claim 8, damping mechanism 31 together with the surfaces of the rail and slide blocks form a bearing element as broadly defined by the claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over DE 41 16 795 in view of JP 2000-184686.

DE 41 16 795 discloses all the limitations of the instant claims with exception to spring actuation and solenoid release of the brake. DE 41 16 795 instead broadly discloses a fluid/valve actuation. JP 2000-184686 discloses a similar guide device and further teaches the use of spring actuation and solenoid release to provide an emergency brake function. It would have been obvious to one of ordinary skill in the art

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at the time the invention was made to utilize spring actuation and solenoid release such as taught by JP 2000-184686 in the device of DE 41 16 795 to provide emergency brake actuation, thereby preventing movement in the event of loss of power.

Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 41 16 795 in view of Kato et al (US# 2003/0062227).

Regarding claim 9, DE 41 16 795 discloses all the limitations of the instant claim with exception to the explicit disclosure of the static friction coefficient in the range of .15 to .25. Kato et al disclose a similar braking apparatus and further illustrates that it is known to optimize the coefficient of friction of bearing members to provide appropriate sliding forces and minimize abrasion damage. It would have been obvious to one of ordinary skill in the art at the time the invention was made to determine through routine experimentation and optimization the appropriate friction coefficient to provide adequate movement and minimal wear and abrasion for a given application. Also note *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Regarding claim 10, DE 41 16 795 discloses all the limitations of the instant claim with exception to the specific material composition for the bearing elements. Kato et al disclose a similar braking system and further teach the use of a porous carbon material prepared by sintering a mixture of plant base carbon and phenol resin. See paragraph [0060]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to select a porous carbon such as taught by Kato et al for the

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bearing element of DE 41 16 795 to reduce abrasion damages, thereby increasing the durability of the device. Also note *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960).

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Muller and Teramachi.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley T King whose telephone number is (571) 272-7117. The examiner can normally be reached on 11:00-7:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on (571) 272-7095. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BTK


DOUGLAS C. BUTLER
PRIMARY EXAMINER
5/31/05
AU 3683